Technology Strategy Team Telecon -- ES Tutorials Working Group Status

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Background

- **Perceived need for Tutorial**
  - **ESE scope (Enhanced understanding of Earth System)**
    - includes complex interrelated science research areas, measurements, sensors and technologies as well as diverse ways of making measurements -- LEO, GEO, airborne, in situ, balloons, field campaigns, radiosondes, sounding rockets, shuttle, etc.
  - **Science Driven Technology Needs**
    - to understand the interrelationships among the science areas, the measurements, the sensors that perform the measurements, and the technologies that enable better sensors and science
    - use this greater appreciation to facilitate the decision-making process, guide source selection and science policies, and proposal evaluation to do more with less

- **Status on February 6, 2001**
  - **As a result of the Stennis TST, put together an ES Tutorial Working Group**
  - **Identified folks with subject matter expertise**
    - **Radar, Microwave, Lidar, Information Technology, etc.**
  - **Identified a number of existing Tutorials and scores of related URLs of excellent quality**
    - **NASA HQ and Centers, USRA, Air Force, DoE, NOAA, et al.**
      - **We have an extensive inventory of existing URLs**
        - » **NASA Educational Outreach extensive and excellent**
        - » **Focused Islands of information**
        - » **well-linked within area of technology Objective & Scope**
  - **Splinter group of ES WG met on June 7,2000 -- J. Duda, G. Prescott, & C. Munroe**

ES Tutorials Working Group

- Jim Duda, Chair/IPO/GSFC
- Frank Peri, LaRC
- Glenn Prescott, NASA HQ
- Gordon Johnston, NASA HQ
- Gran Paules, NASA HQ
- Jim Gatlin, GSFC
- Rod Zieger, JPL

Status

- **Identified many excellent tutorials**
- **Earth Science Overview**
  - **We can present a clear and consistent tutorial**
    - **That addresses the entire scope of the Earth Science Enterprise**
      - **LEO, GEO, airborne, in situ, balloons, surveys, etc.**
    - **That Clearly links science research areas/needs with needed measurements and associated sensors and technologies**
    - **That provides a Layered Approach**
  - **Synthesize the highest tutorial and provide links to more technical material**

Evolution

- **Guidance Needs for ES Tutorial Working Group**
  - **Consensus for Overall Strategy on objectives, scope, audience**
  - **Develop a layered framework for the web**
  - **Get and use resources to implement**
    - **Identify available resources**
    - **Subject matter experts to write tutorials**
      - **provide outline**
      - **review and edit content to ensure consistency**
    - **Web developer and graphic artist**

Tutorial and Technology URLs

- Tutorial URLs
  - http://rst.gsfc.nasa.gov/
  - http://www.newc.com/rsat/tutorials.html
  - http://www.ccrs.nrcan.gc.ca/ccrs/eduref/tutorial/indexe.html
  - http://asimov.esrin.esa.it:8000/exercises/default/
  - http://mercator.upc.es/tutorial/intro1.html
  - http://education.ssc.nasa.gov/crsp-wdet/education/rstutorial.htm
- Technology URLs
  - http://www.sandia.gov/RADAR/whatis.html
  - http://ranier.hq.nasa.gov/Sensors_page/SciSize.html
  - http://ranier.hq.nasa.gov/Sensors_page/InstHP.html
  - http://ranier.hq.nasa.gov/Sensors_page/Background/Spectrometer.html
  - http://www.asf.alaska.edu/user_serv/sar_faq.html
  - http://southport.jpl.nasa.gov/desc/imagingradarv3.html
  - http://www.jpl.nasa.gov/srtm/
  - http://mitb.gsfc.nasa.gov/GMWG/index.htm
  - http://aesd.larc.nasa.gov/GL/tutorial/lidar/lidar_mn.htm
  - http://orbit35i.nesdis.noaa.gov/arad/fpdt/1_intro/chap1.html